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THE HISTORY OF
STAGE AND THEATRE
LIGHTING



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STAGE AND THEATRE
LIGHTING



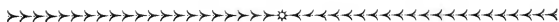
THE EDISON ELECTRIC
ILLUMINATING COMPANY
OF BOSTON

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THE EDISON ELECTRIC
ILLUMINATING COMPANY
OF BOSTON

Printed in U. S. A.



FOREWORD

THE advertisements of this series, depicting the history of Stage and Theatre Lighting, appeared during 1928-1929 in the programs of Boston Theatres.

Many requests for the complete series prompted the publication of this booklet, which we hope you will find interesting. If, in your reading, you derive as much pleasure from its pages as we have in its preparation, then our effort has, indeed, been worthwhile.

THE EDISON ELECTRIC ILLUMINATING COMPANY
OF BOSTON

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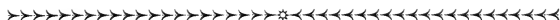
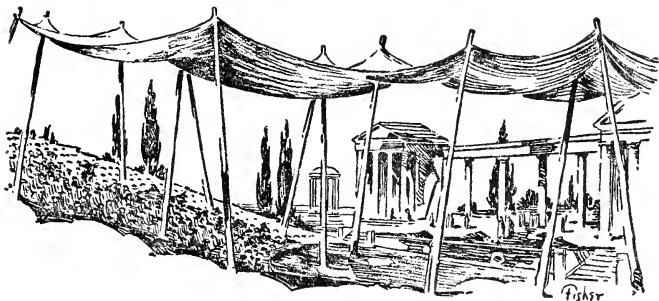


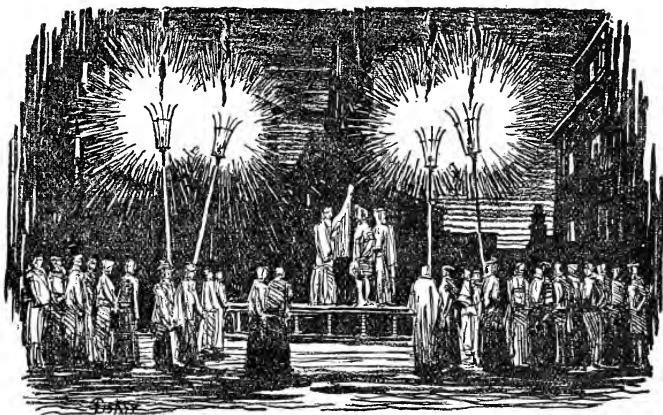
TABLE OF CONTENTS

	Page
The birth of decorative lighting	9
The need for artificial stage lighting	11
Candles light the first enclosed theatre	13
The origin of colored stage lighting	15
The first footlights	17
Eighteenth Century developments	19
Kerosene lamps succeed candles	21
The first use of gas	23
In the limelight	25
Electricity makes its entrance	27
The first electric spotlight	29
Electric candles make their debut	31
Edison's lamp a success	33
A modern spotlight	35
Futurism stimulates stage lighting	37
Diffused theatre lighting	39
Foyer lighting	41
Exterior lighting	43
Effective stage lighting	45

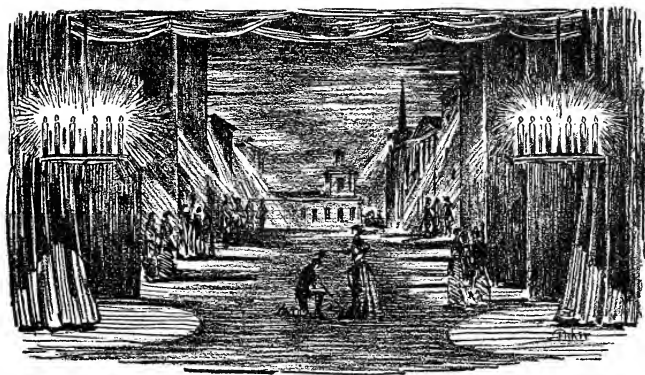


THE *writings of VALERIUS MAXIMUS tell us of the first crude attempts to enhance the drama by the use of decorative lighting.*

¶ This ancient scribe, writing in 78 B. C., pictures the dramas of the Greeks and Romans held out of doors in broad daylight. Over the cavea (orchestra and pit), gay awnings of red, yellow, and blue were stretched, and — fluttering in the breeze — bathed the players in softly tinted rays of the transmitted sunlight.

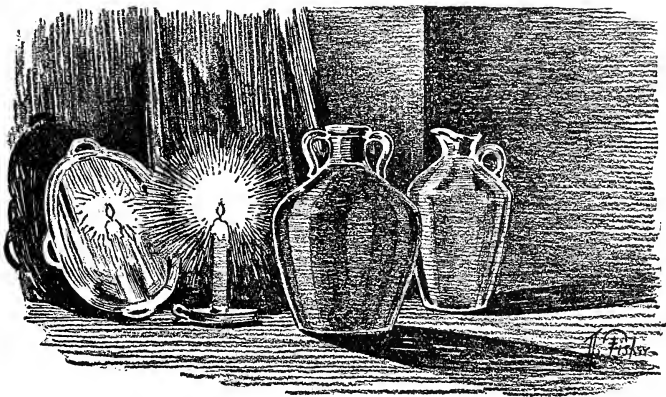


THE need for artificial stage lighting came during the period of 1200 to 1400 A. D., when for the first time in history performances were given after the sun had set. Cressets, or crudely woven baskets of iron, mounted on poles, were filled with blazing pine knots and pitch, and by their fitful, flickering glare the audience viewed the tableaux and religious spectacles being staged.



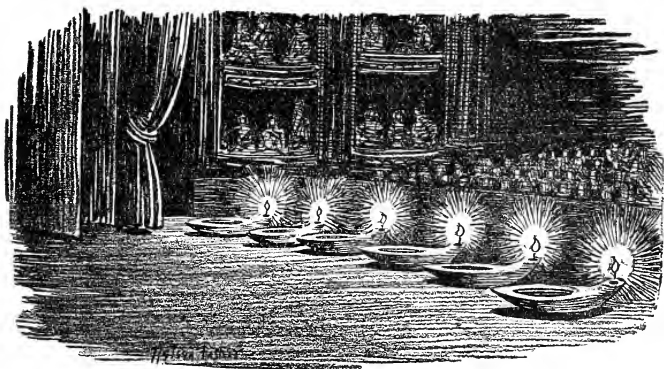
EARLY in the FIFTEENTH CENTURY came the candle to light the stages of the first enclosed theatres.

¶ Age worn parchments disclose the fact that in 1452 A. D. candelabra illuminated the stage. In addition, candles were placed in the streets and upon house tops and towers of the stage settings—marking the first endeavour at illumination from the wings which has now been perfected in our modern stage side lighting.

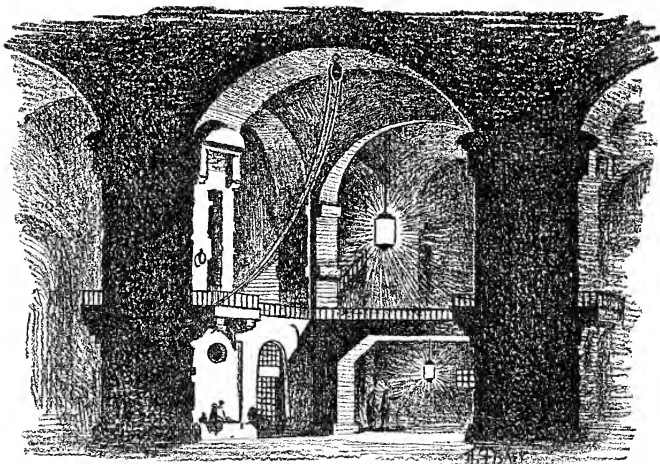


THE *origin of colored stage lighting is traced back to one SEBASTIANO SERLIO, an Italian theatre-worker of the sixteenth century.*

☛ In 1551, he perfected a plan for placing candles behind bottles filled with red or blue liquid, the result being intensified by putting bright basins for reflectors behind the candles. From this humble beginning has developed the gorgeous spectacles of color, so familiar to the theatre-goer of the present time.



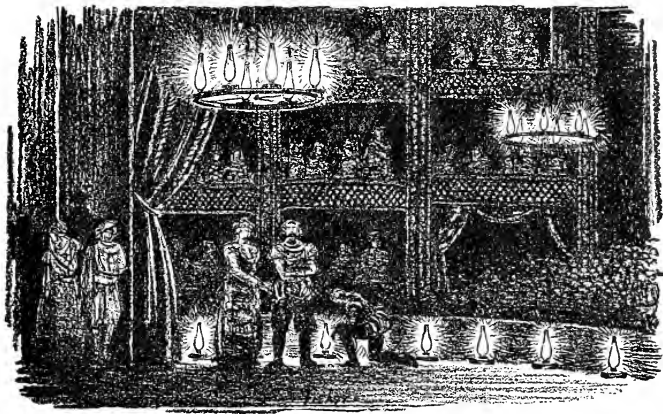
THE first attempt to use footlights for stage illumination is credited to Nicola Sabbatini, an Italian producer, working in the early part of the seventeenth century. About 1620 he designed a parapet to be erected at the front of the stage with a row of oil lamps placed behind it. This rudimentary and meagre arrangement was the first step in the development of footlights in the modern theatre.



A prison scene by PIRANESI

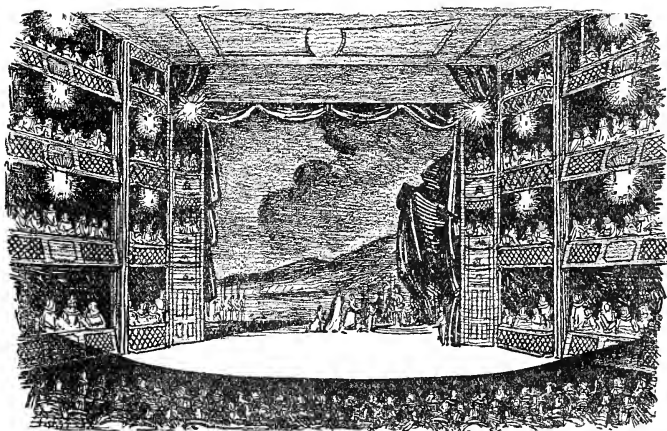
AS THE THEATRE and its scenery developed in the eighteenth century, notable advancement was made in stage lighting effects.

Perhaps the greatest scenic artist of this age was Gian Battista Piranesi (1720-78) of Venice, a lover of bold light and shade. He found that darkening the front of the stage and using a lighted background produced a marked illusion of reality upon his audience. Candles within lanterns were his only means for creating this impression.



THE KEROSENE LAMP *was invented in 1783, in France.*

☛ Just before the close of the century, managers of many playhouses throughout the Continent and United States installed this new method of lighting. It was an improvement over candlelight, but still left much to be desired. To vary the lighting effects small screens were pushed out or pulled away from the lamps by stage hands using long poles. How far we have advanced!



IT was discovered in 1781 that gas could be produced in sufficient quantities for illumination.

☛ In 1803, FREDERICK ALBERT WINSOR, realizing the great advantage of open-flame gas burners over candles or lamps, successfully equipped the stage of the Lyceum theatre in London with this new type of illumination. A few years later the Chestnut Street Opera House in Philadelphia adopted this better method of lighting, manufacturing the gas with crude machinery in the basement of the theatre.

"In the Limelight"

It is interesting to trace the origin of the phrase "in the limelight," which has come to mean "the center of attraction." The "Limelight" was nothing more than a spotlight invented by Henry Drummond in 1816, but not used to any great extent until about 1860.

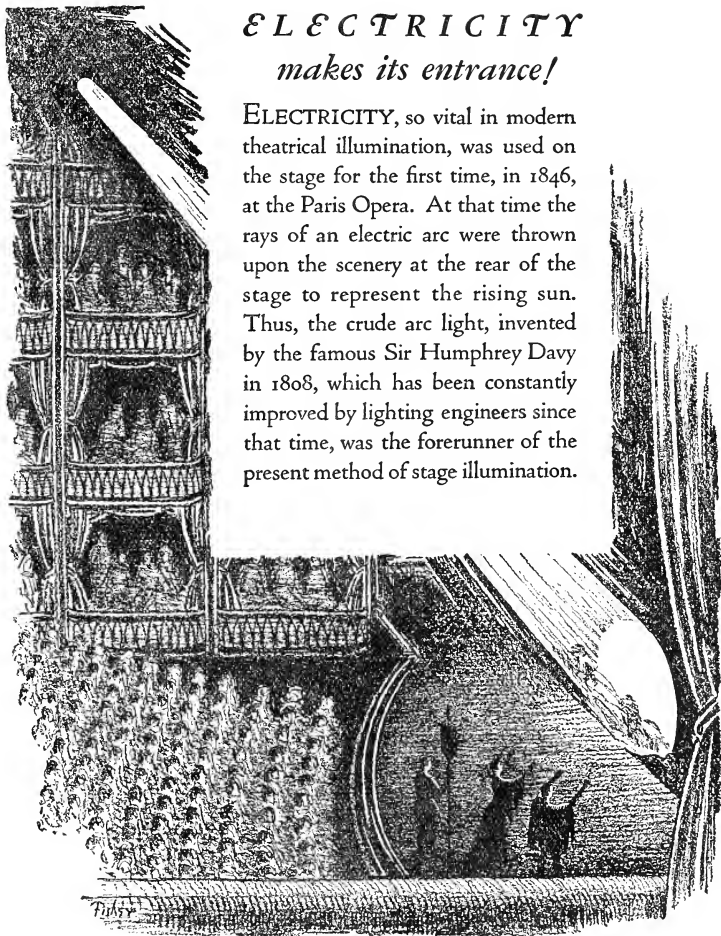
Drummond discovered that by heating a piece of lime to incandescence, a brilliant white light resulted, and this invention has been improved by lighting engineers until we have the present electrical "spot" without which no theatrical performance is complete.



THE HISTORY OF STAGE AND THEATRE LIGHTING

ELECTRICITY *makes its entrance!*

ELECTRICITY, so vital in modern theatrical illumination, was used on the stage for the first time, in 1846, at the Paris Opera. At that time the rays of an electric arc were thrown upon the scenery at the rear of the stage to represent the rising sun. Thus, the crude arc light, invented by the famous Sir Humphrey Davy in 1808, which has been constantly improved by lighting engineers since that time, was the forerunner of the present method of stage illumination.







The First Electric Spotlight

DURING a production of the opera "Moses" at the Paris Opera House in 1860, theatre-goers witnessed a new and startling theatrical illusion.

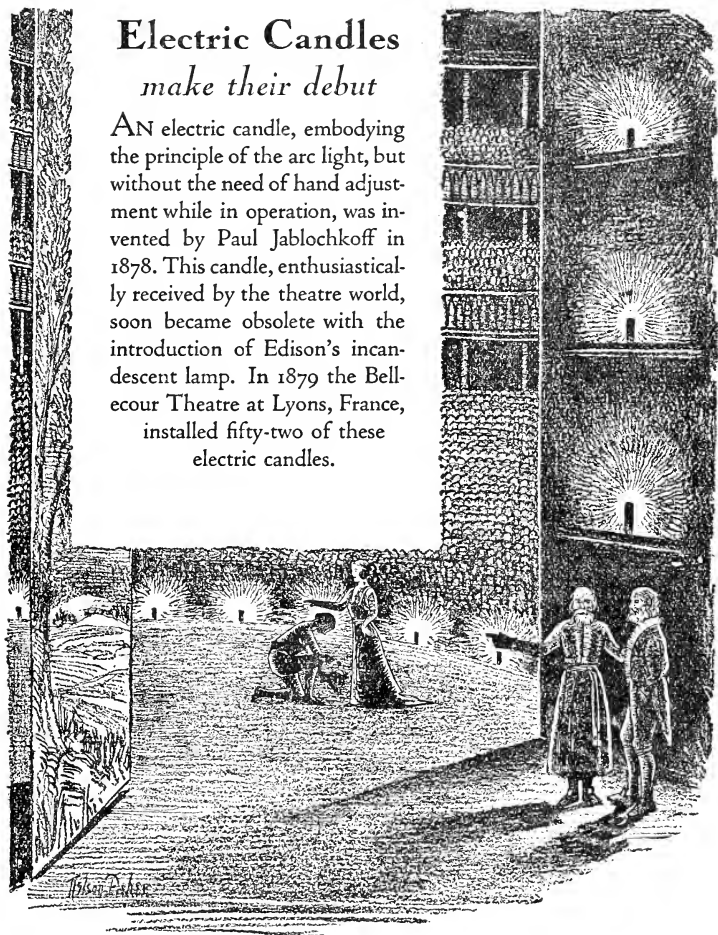
In one scene, against a dark background, Moses appeared arrayed in robes of such a dazzling white that the entire audience was amazed.

They were seeing the effect of the first electrically operated spotlight, and the result was so striking that it won instant approval throughout the theatrical world.



Electric Candles *make their debut*

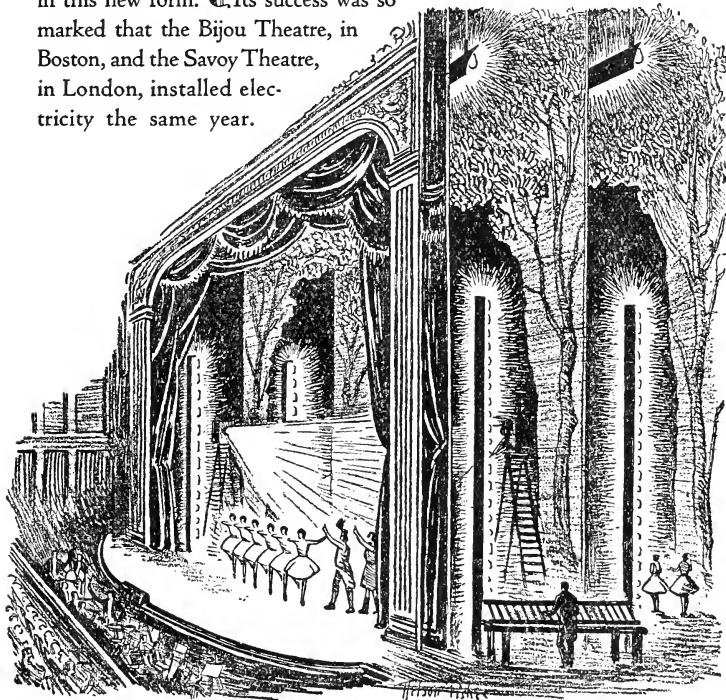
AN electric candle, embodying the principle of the arc light, but without the need of hand adjustment while in operation, was invented by Paul Jablochkoff in 1878. This candle, enthusiastically received by the theatre world, soon became obsolete with the introduction of Edison's incandescent lamp. In 1879 the Bellcour Theatre at Lyons, France, installed fifty-two of these electric candles.





Edison's Lamp a Success

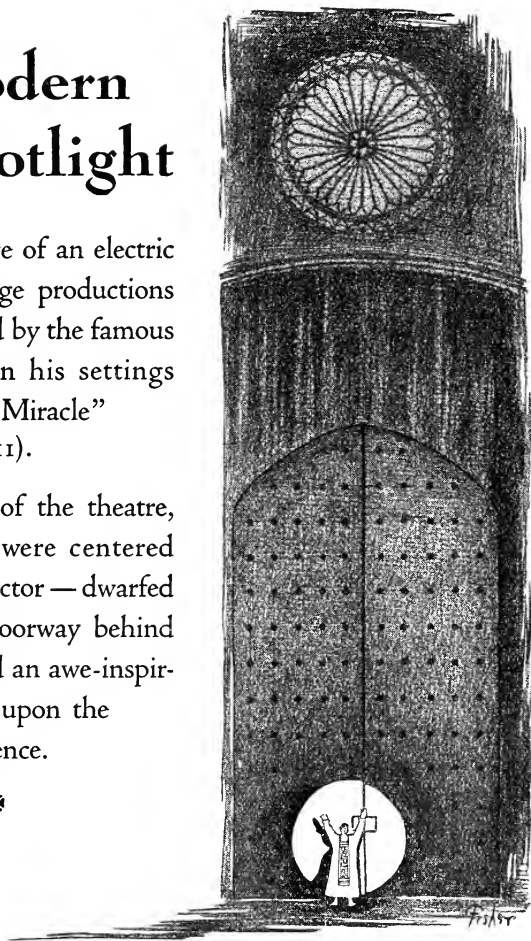
¶ The incandescent electric lamp, developed by Edison in 1879, revolutionized theatre lighting the world over. ¶ In 1882 an Electrical Exposition was held at Munich, Germany. Here a small temporary theatre was erected and completely lighted by incandescent bulbs, so that theatrical managers might see the advantages of using electricity in this new form. ¶ Its success was so marked that the Bijou Theatre, in Boston, and the Savoy Theatre, in London, installed electricity the same year.



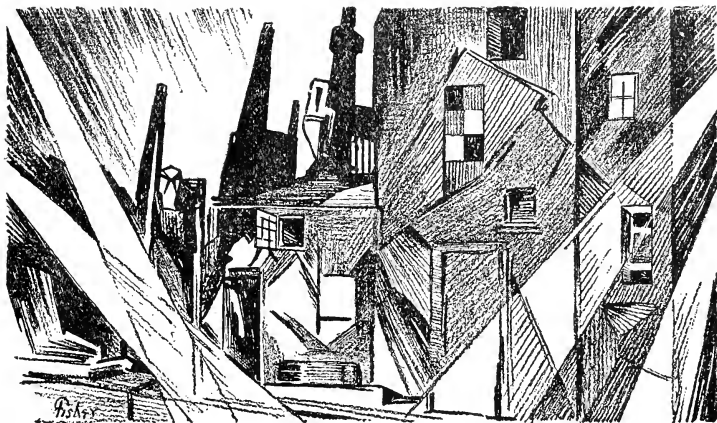
A Modern Spotlight

The importance of an electric spotlight in stage productions was well realized by the famous Ernest Stern in his settings for "The Miracle" (1911).

From the rear of the theatre, powerful rays were centered upon a single actor — dwarfed by the huge doorway behind — which created an awe-inspiring effect upon the audience.





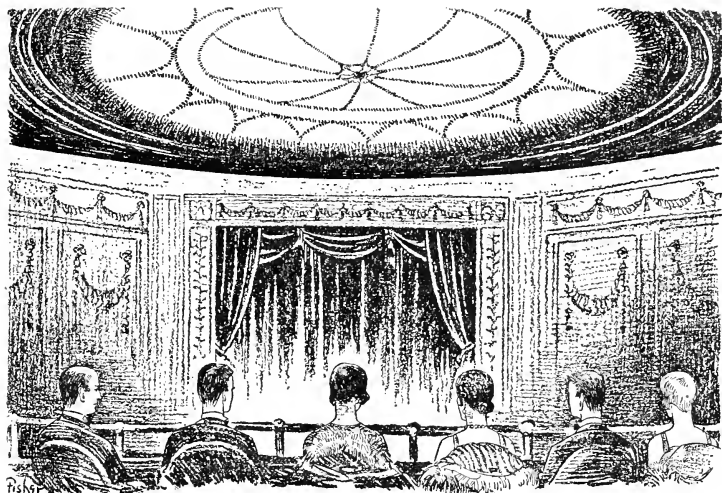


FUTURISM

stimulates stage lighting

FUTURISTIC, as well as cubistic art, caused a great sensation the world over about 1919. Their advent stimulated new ideas in electric stage lighting. Scenic artists needed something to accentuate their grotesque creations, and found that with the help of electricity, they could gain the desired effect. Both these radical movements in art have since been superseded by the present-day modern art. The above illustration is a futuristic scene taken from a German play, *Die Wüpper*.

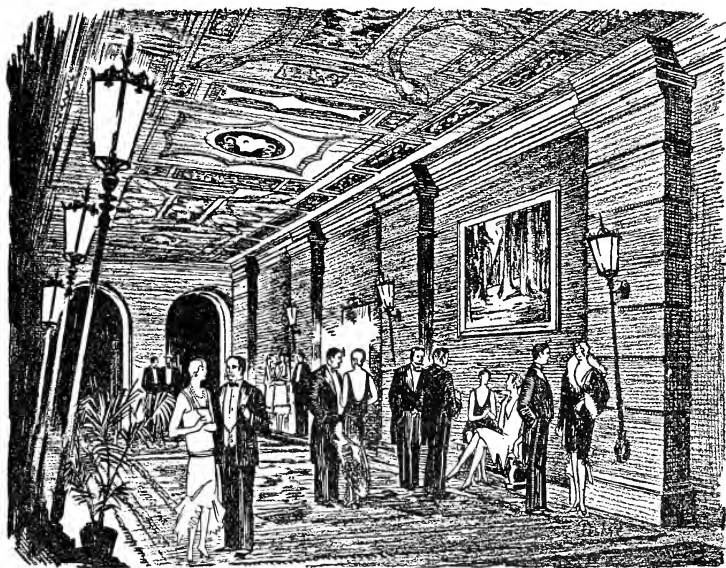




Diffused Theatre Lighting

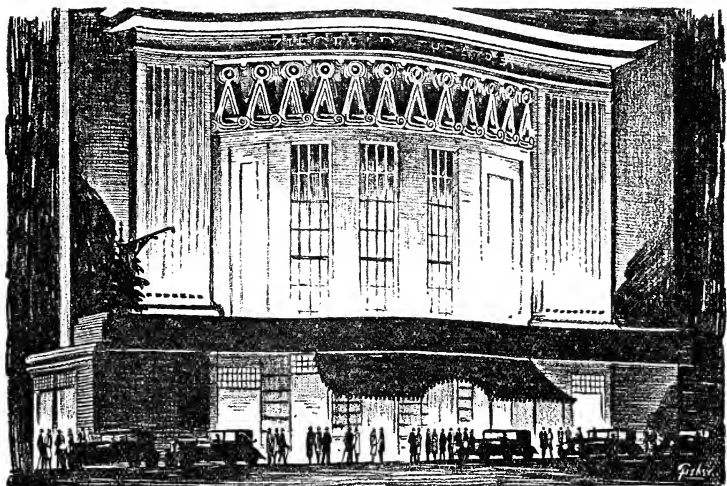
ILLUMINATION, without bright, dazzling lights, or extreme contrasts, tends to rest the eye and promote relaxation. For this reason, diffused lighting, or lighting that spreads evenly without glare, has become the accepted mode for modern theatres. One of the most pleasing forms of diffused lighting is the decorated glass panel ordinarily used beneath the balcony. Through this panel, colored lights in varied tones bathe the audience in a soft glow, not unlike the effect of sunlight transmitted through the colored awnings used by the Greeks and Romans more than one thousand years ago.

FOYER LIGHTING



ONLY in recent years have theatre managers realized the intrinsic value of their foyers for attracting and impressing the public. Pleasing decorations and carefully planned lighting for this part of the theatre now receive very close attention by the management.

Illustrated above is a typical modern foyer, appointed in the style of the Italian Renaissance, and the illumination by lantern-type electric torchieres gives a final touch of realism.



EXTERIOR LIGHTING

THEATRICAL men have come to realize the great importance of having the exteriors of their playhouses artistically illuminated.

Harsh, garish brilliance has given way to softly modulated and blended lights, which harmonize with the beauty of the structure, and bring out its architectural grace. Illuminating engineers are responsible for the increasing number of such modern lighting installations . . . A typical example of such an installation is the Ziegfeld Theatre, in New York City, illustrated above.



EFFECTIVE STAGE LIGHTING

STAGE lighting for the modern musical revue requires the skill of expert illuminating engineers. The success of a beautiful scene that holds an audience spellbound for a few moments is largely attributed to perfect harmony in lighting . . . which has taken, perhaps, many months of study to design.

The scene illustrated above, entitled "Cleopatra's Barge,"
is from the Casino de Paris Revue,
"A Night in Paris."

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